DYNEGY

DYNEGY MIDWEST GENERATION, LLC
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Collinsville, IL 62234
618.343.7837

March 28, 2018

Via Certified Mail and Electronic Mail

Nicole Veilleux
Senior Counsel
U.S. Department of Justice
Enforcement Section
P.O. Box 7611
Ben Franklin Station
Washington, DC 20044-7611
Nicole.veilleux@usdoj.gov

Re: ***United States, et al. v. Illinois Power Company*, No. 3:99-cv-833-MJR**

Dear Ms. Veilleux:

This letter responds to your letter dated February 26, 2018 requesting additional information regarding Dynegy Midwest Generation, LLC's *Notice of Force Majeure Event Concerning Baldwin Unit 1* (Notice) (dated December 6, 2017, as corrected December 14, 2017) to enable EPA to consider further our force majeure claim.

As an initial matter, we respectfully disagree with EPA's position that our Notice is "likely to be untimely" under Consent Decree paragraph 138 because it was submitted more than 14 business days after November 10, 2017. As stated in the Notice, the first indication of the presence of high sulfur coal in the coal feed to Unit 1 occurred on November 10, 2017. That does not, however, mean that on November 10, DMG should have known (or knew) that a violation of the SO_2 30-Day Rolling Average Emission Rate may be caused by the first force majeure event (i.e., the culvert failure and inability to revise railroad delivery schedules of low sulfur coal). DMG's first response was to take aggressive action in an attempt to ensure that the SO_2 30-Day Rolling Average Emission Rate would not be exceeded. That included shutting down Unit 1 and delaying restart of the Unit until a temporary dry sorbent injection (DSI) system could be installed. DMG reasonably believed that its actions would ensure compliance with the SO_2 30-Day Rolling Average Emission Rate. It is unreasonable, with the certainty of hindsight, to require filing force majeure notices for absolutely anything that in real time prospectively "may cause" a violation of the Consent Decree. A rule of reason is warranted, otherwise protective force majeure notices would become routine filings serving no meaningful purpose other than to waste resources.

Even assuming for purposes of argument that the Notice was untimely for the first force majeure event (i.e., the culvert failure and inability to revise railroad delivery schedules of low sulfur coal), the Notice was timely for the second force majeure event (i.e., the Malfunctions of the boiler feed pumps) that occurred during the November 16 startup. Notably, given DMG's efforts to minimize the impact of the first force majeure event (i.e., shutting down Unit 1 and installing a temporary DSI system, and DMG's reasonable belief that such actions would avoid a violation of the SO_2 30-Day Rolling Average Emission

Rate), but for the boiler feed pump Malfunctions that occurred on November 16, Baldwin would not have exceeded the SO_2 30-Day Rolling Average Emission Rate.[1] DMG did not have any reason to foresee the November 16 boiler feed pump Malfunctions. Thus, the Notice was timely for (at the very least) the second force majeure event, as it was submitted within 14 business days of the Malfunctions on November 16.

The following responds to the fifteen questions posed in your letter:

Question 1. Explain why the coal pile tapped by DMG on November 10, 2017 ("the Affected Coal Pile"), wasn't used by DMG between the year 2000 and November 10, 2017?

DMG Response: The plant has a single coal storage area that includes the Long Term Coal Storage (LTCS) pile and a smaller ready pile. Coal from the supply trains that is not sent directly to the unit bunkers is deposited in the ready pile. Only if the ready pile becomes too large is the coal then distributed throughout the coal storage area. When Baldwin Unit 1 began operation in 1970, it fired only high sulfur Illinois coal. Accordingly, high sulfur coal was used to form the base of the coal storage area (i.e., the Affected Coal Pile). While the quantity of coal in the coal storage area at Baldwin has varied over the years, high sulfur coal delivered pre-1999/2000 still constitutes the base of the coal storage area. While limited amounts of high sulfur coal from the base of the coal storage area has been unintentionally burned since 2000, it was not in an amount that caused an exceedance of any SO_2 emission limit.

The Baldwin facility converted to low sulfur coal in 1999-2000. At that time, low sulfur coal was stored on top of the high sulfur coal that remained in the coal storage area. Since then low sulfur coal has been deposited and removed, as needed, from the exposed top portions of the coal storage area. Notably, low sulfur coal looks similar to high sulfur coal and there is no effective line of demarcation between the high sulfur coal in the base of the coal storage area from low sulfur coal that was deposited on top of it. DMG made no intentional effort to combust the high sulfur coal in the base of the coal storage area pile prior to entry of the DMG Consent Decree in May 2005 and, furthermore, since entry of the Consent Decree (which established the 30-day rolling average SO_2 limit of 0.100 lbs/mmBtu and because Baldwin's spray dryer absorbers were designed to comply with the Consent Decree SO_2 limit while combusting low sulfur coal), DMG has not made an intentional effort to combust the high sulfur coal in the base of the coal storage area.

Due to the sequence of events noted in the December 6, 2017 letter, in November 2017 the station's LTCS pile and ready pile were severely depleted and high sulfur coal from the base of the coal storage area was unknowingly loaded to the Unit 1 coal bunkers.

Question 2. If you maintain any high sulfur coal piles at the facility, or coal piles with an unknown or undetermined sulfur content (other than the Affected Coal Pile), please specify the number of each type.

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[1] As explained in our December 6 letter, if the SDA startup on November 16 had proceeded normally without the boiler feed pump Malfunctions, the Unit's SO_2 emissions would have been controlled below the Full Scale Range, thereby avoiding the required substitution of high values per the 40 CFR Part 75 regulations and, without such substitution, the 30-day rolling average SO_2 value would be below the Consent Decree limit.

DMG Response: The Baldwin facility has only two coal piles within its coal storage area: the LTCS pile and the ready pile. See our response to Question No. 1. There are no high sulfur coal piles at Baldwin.

Question 3. Indicate whether DMG has taken any sampling surveys of the Affected Coal Pile or generated any maps indicating the location(s) of high sulfur coal at the facility and, if so, when such actions were taken.

DMG Response: As indicated in our December 6, 2017 notice, a sampling survey of the LTCS pile was performed following the November 16 incident. That sampling survey was performed on November 17, 2017. The survey consisted of core samples taken at numerous locations across the base of the LTCS pile to determine sulfur content. The results of the survey were reported to DMG on December 6, 2017. The survey results were used to create a map showing the approximate depth and extent of the higher sulfur coal throughout the base of the LTCS pile. However, due to the constant movement of coal into and out of the coal storage area, such mapping is necessarily imprecise and serves only as an approximation of the depth and extent of the higher sulfur coal.

Question 4. Does DMG typically store extra PRB coal on-site for contingencies or emergency situations? If so, please identify the location and quantity of such PRB coal reserves.

DMG Response: As stated in the response to Question 2 above, the Baldwin facility has only two coal piles: the LTCS pile and ready pile. Baldwin does not maintain an extra reserve of coal supplies either on-site or off-site for contingencies or emergency situations.

Question 5. Indicate whether DMG has blended coal types to avoid the use of HSC and, if so, when such blending occurred, where blended coal was stored, and information regarding the sulfur content of the blended coal.

DMG Response: Baldwin maintains the LTCS pile and ready pile in its coal storage area. There are no coal blending facilities at Baldwin and there are no storage piles at Baldwin containing blended coal. As explained above, at the time Baldwin converted to low sulfur coal in 1999-2000, the low sulfur coal was deposited on top of the high sulfur coal that formed the base of the coal storage area. Since all coal is stored in a single storage area, there are areas where high sulfur and low sulfur coal have mixed over time, but there is no "blended" coal pile. The Baldwin facility does not use bended coal types to avoid the use of high sulfur coal.

Question 6. What steps has DMG taken to inspect and/or maintain the railway culverts, or to otherwise prevent a culvert failure, prior to the October 25, 2017 incident?

DMG Response: DMG voluntarily, using a certified third party inspector, inspects its rails that serve the Baldwin facility on a monthly basis. (The culvert that failed is exempt from the Federal Railroad Administration rules that require annual inspections by a qualified engineer.) We also perform repairs, as needed, on the lead track, including tie replacements, ballast clean out and rail changes. It was during a voluntary monthly rail inspection that the condition of the culvert was noted, which lead to the confirmation by the Canadian National track inspector that the tracks were unsafe and that the culvert needed repair.

Question 7. During the period of time between the culvert's repair on Oct. 28 and the scheduled maintenance on Nov. 6, how much PRB coal was delivered to DMG? What is the average coal use at the facility?

DMG Response: During the period Oct. 28 2017 through Nov. 6, 2017, Baldwin received 98,128 tons of low sulfur coal. The Baldwin facility combusted 139,937 tons of coal during this time period. The coal storage area was depleted by 41,409 tons. The average coal use was 13,994 tons per day for this time period (typical full load operation of both Baldwin units consume approximately 16,000 tons of coal). As mentioned in our December 6, 2017 letter, from October 23rd through November 10th, the Baldwin coal storage area was depleted by about 164,000 tons.

Question 8. How far in advance of Nov. 6 was DMG aware that the scheduled maintenance outage would be taking place?

DMG Response: DMG scheduled the maintenance outage for the rotary dumper in early October 2017. As explained in our December 6 letter and below in the response to Question 9, because the railroad had already diverted the trains based on the scheduled dumper maintenance outage and it was not possible to redirect the trains, DMG performed the planned dumper maintenance within the shortened maintenance schedule.

Question 9. After the failed culvert was discovered on Oct. 25, what steps did DMG take between that time and Nov. 6 to delay the planned maintenance? What steps did DMG take between that time and Nov. 6 to schedule additional PRB deliveries before the planned maintenance?

DMG Response: Once the rotary dumper maintenance outage was scheduled in early October 2017, the train delivery schedules were adjusted to ensure that no trains would arrive at Baldwin during the rotary dumper maintenance project. As a result, the trains that normally would have delivered coal to the Baldwin facility during the period Nov. 6 - Nov. 9 were either taken out of service or redirected to other locations by the railroad. It can take weeks to locate and load trains and transport the low sulfur coal from Wyoming to the Baldwin facility. There was insufficient time after the repair of the culvert and reopening of the rail line on October 28, 2017 and the start of the rotary dumper maintenance outage which began on November 6, 2017, to schedule and receive any additional deliveries of low sulfur coal.

Upon discovery of the failed culvert, no steps were taken to delay the planned rotary dumper outage because trains of low sulfur coal would not be available to meet that delivery window. Instead of cancelling or delaying the start of the rotary dumper maintenance, DMG decided the best way to receive more low sulfur coal quickly at the Baldwin facility was to shorten the duration of the rotary dumper maintenance outage from five days to three days.

Question 10. Provide a process flow diagram of the Baldwin Unit 1 system, including interconnections between the boiler feed pumps (BFP), the spray dryer absorber(s) (SDA), and the turbines.

DMG Response: A process flow diagram that depicts the interconnections between the steam-driven boiler feed pumps and the Unit 1 turbine is provided in Attachment A.

The SDA is in the flue gas path of Baldwin Unit 1. In contrast, the boiler feed pumps and turbines are in the feedwater path of Unit 1. Thus, the SDA is not directly physically interconnected with the boiler feed pumps and turbines.

While the SDA and the boiler feed pumps/turbines are not directly physically "interconnected", operation of the SDA depends on operation of the boiler feed pumps. That is, the boiler feed pumps provide water to the boiler water-wall tubes which allows the operators to increase the unit load and heat to the SDA so that the SDA can be safely placed into service. The SDA requires a significant amount of heat to evaporate the moisture in the lime slurry for effective SO2 removal. That heat comes from the furnace where the coal is combusted. The amount of heat that can be created in the furnace is limited by the amount of water that can be pumped through the water-wall tubes by the boiler feed pumps. For initial boiler startup, the initial water-wall water typically comes from a relatively small electric boiler feed pump. Much larger steam-driven boiler feed pumps are needed to provide larger amounts of water to the water-wall tubes to allow the furnace to combust more coal and send more heat to the SDA so that it can be placed into service.

Question 11. Explain generally how DMG's boiler feed pumps are interconnected at Baldwin Unit 1 with the SDA system.

DMG Response: See our response to Question 10.

Question 12. What redundancies does DMG have in place, if any, in the event of a failure of a boiler feeder pump?

DMG Response: Baldwin Unit 1 has one electric-driven boiler feed pump and two steam-driven boiler feed pumps, but all three boiler feed pumps are not required to startup the SDA. Operation of the electric-driven boiler feed pump and one steam-driven boiler feed pump or operation of both steam-driven boiler feed pumps is sufficient to place the SDA into service. The capacity of the electric-driven feed pump alone is not sufficient to place the SDA into service. Therefore, there is one Unit 1 boiler feed pump that is "redundant" with regard to startup.

However, both steam-driven boiler feed pumps are required for Unit 1 to achieve full load. Therefore, there are no Unit 1 boiler feed pumps that are "redundant" during full load operation.

While all three Unit 1 pumps were available for service when the unit startup began on November 16, 2017, the 1A boiler feed pump failed to start at 8:47 AM and an attempt to start the 1B boiler feed pump failed at 8:59 AM.

Question 13. From November 16, 2013 through November 15, 2017, please explain any instances of a malfunction of a BFP, including the root cause of the failure and the duration of the repair.

DMG Response: Attachment B lists the Unit 1 boiler feed pump malfunctions for the specified period. Attachment B includes a description of each failure, but a root cause analysis of each event was not performed at the time of each occurrence. Prior to November 16, 2017, no Unit 1 boiler feed pump malfunctions had occurred since 2015.

Question 14. Explain what steps DMG has taken to prevent the BFPs at Baldwin Unit 1 from failing, including a summary of maintenance practices and the frequency of such measures.

DMG Response: The boiler feed pumps did not start on the first attempts on November 16, 2017 due to problems with the electrical relay switches and governor valves, not the boiler feed pumps. Preventive maintenance is performed on these pumps approximately every three years during each planned outage when a pump is refurbished, associated valves and relays are also checked for proper operation. Maintenance is performed in accordance with the results of these relay and valve checks and as warranted.

Question 15. In the past five years, how many system restarts on process and pollution control units have you initiated at the facility? Please provide the identity of each unit restarted and the date of each restart.

DMG Response: Please see Attachment C for a summary of Unit 1 downtime. The column labeled as "End Time" indicates when each Unit 1 system restart began over the past five years.

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If you have any questions concerning these responses or need further information, please contact Rick Dierickx, Managing Director, Environmental Compliance, at 618-343-7761.

> This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

Sincerely,

Jim R. Kipp

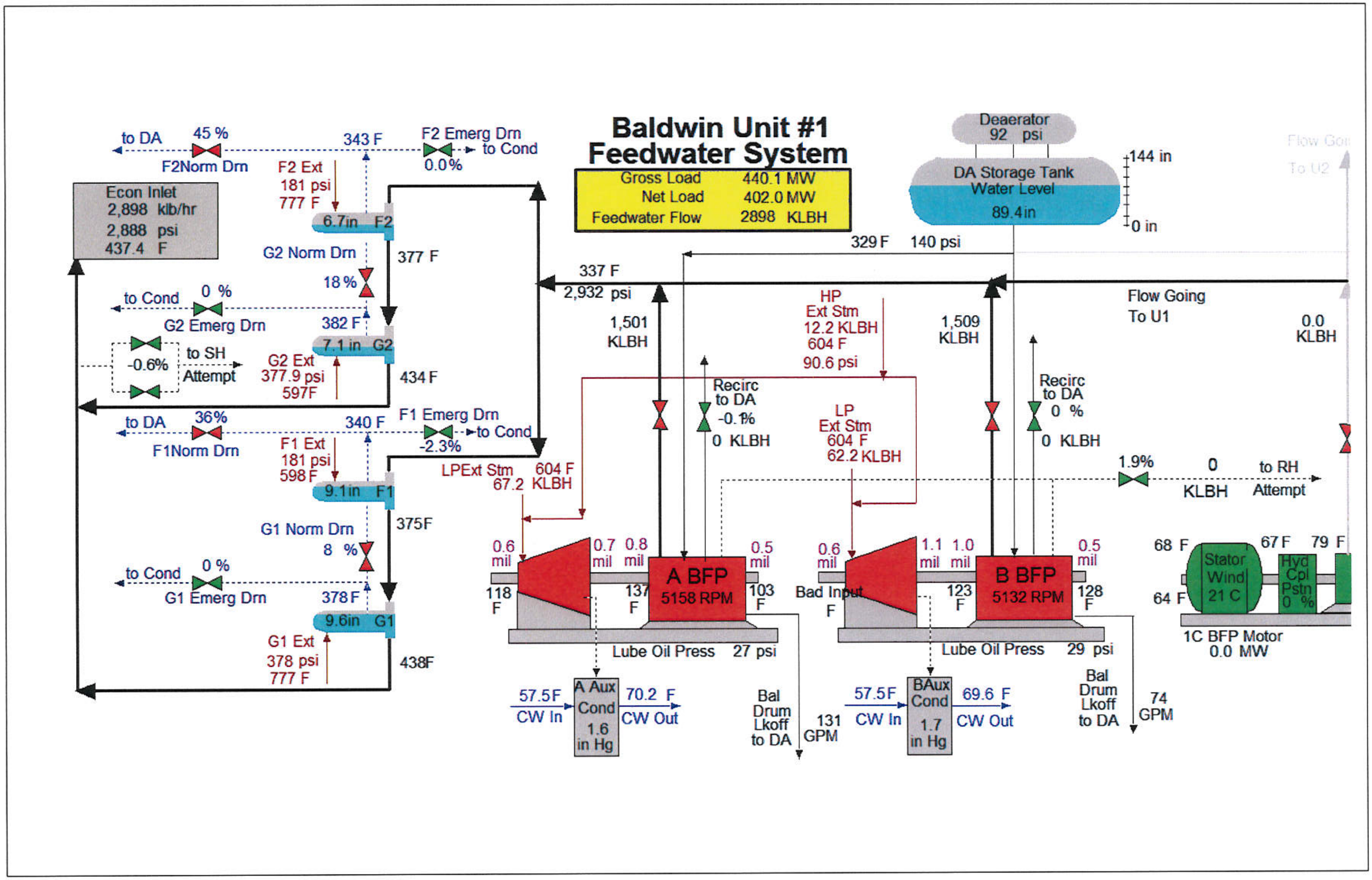
James R. Kipp
Vice President and General Manager Plant Operations MISO
Dynegy Midwest Generation, LLC

Enclosures:
- Attachment A – Unit 1 Process Flow Diagram
- Attachment B – BFP Malfunctions 11/16/2013 – 11/15/2017
- Attachment C – Unit 1 Starts

cc: Executive Vice President, General Counsel & Chief Compliance Officer
Dynegy Inc.
601 Travis Street, Suite 1400
Houston, Texas 77002

DMG Consent Decree Distribution List

Attachment A – Unit 1 Process Flow Diagram (snapshot of current conditions – does not represent design or full load conditions)



Attachment B – Unit 1 BFP Malfunctions 11/16/2013 – 11/15/2017

Unit	Start of Outage	End of Outage	Description
1	6/17/14 20:50	6/18/14 12:00	1B BFP thrust bearing pre-trip alarm
1	11/17/14 16:36	11/20/14 03:03	1B BFP not available when unit was released to Operations
1	11/23/14 02:37	11/24/14 10:35	1B BFP has oil leak (possibly cooler leak)
1	11/29/14 04:28	11/29/14 14:21	1B BFP has oil leak (possibly cooler leak)
1	1/28/15 15:09	1/30/15 01:32	1B BFP oil leak at the front standard
1	9/15/15 14:33	9/23/15 16:37	Thrust bearing issues fixed while FD fan was still limiting factor
1	9/23/15 16:37	9/23/15 18:48	Thrust bearing issue B BFP
1	11/14/15 02:03	11/14/15 16:09	Suction strainer steam leak. Fixed during B FD fan derate, non-curtailing

Source Downtime Report

Attachment C - Unit 1 Starts

DYNEGY

Baldwin Unit 1

From: 01/01/2017 00:00 To: 12/31/2017 23:59
Generated: 03/16/2018 12:05

Facility Name: Baldwin
Location: Reports Facility Location

Tag Name: U1_UnitOn_TF_1H

Inc No	Start Time	End Time	Duration in Hour(s)	Reason Code - Description	Action Code - Description
1	02/04/2017 03:00	02/13/2017 17:59	231		
2	03/19/2017 03:00	03/25/2017 17:59	159		
3	03/26/2017 05:00	03/26/2017 12:59	8		
4	04/07/2017 03:00	04/09/2017 10:59	56		
5	05/06/2017 01:00	05/07/2017 09:59	33		
6	05/13/2017 04:00	05/13/2017 22:59	19		
7	05/15/2017 11:00	05/18/2017 00:59	62		
8	05/18/2017 10:00	05/18/2017 23:59	14		
9	06/06/2017 03:00	06/08/2017 07:59	53		
10	07/28/2017 01:00	07/31/2017 10:59	82		
11	08/06/2017 13:00	08/07/2017 22:59	34		
12	08/23/2017 21:00	08/26/2017 00:59	52		
13	10/20/2017 01:00	10/22/2017 18:59	66		
14	10/27/2017 02:00	10/29/2017 12:59	59		
15	11/11/2017 19:00	11/15/2017 23:59	101		

Operating Time Summary

Available Data for Report (excludes missing data):	8,760.00 Hour(s)
Total Downtime:	1,029.00 Hour(s)
Downtime Percentage:	11.75 %
Total Uptime:	7,731.00 Hour(s)
Uptime Percentage:	88.25 %

Source Downtime Report

Baldwin Unit 1

From: 01/01/2013 00:00 **To:** 12/31/2016 23:59 **Facility Name:** Baldwin
Generated: 03/16/2018 12:01 **Location:** Reports Facility Location

DYNEGY

Tag Name: U1_UnitOn_TF_1H

Inc No	Start Time	End Time	Duration in Hour(s)	Reason Code - Description	Action Code - Description
1	01/13/2013 03:00	01/15/2013 19:59	65		
2	03/05/2013 02:00	03/10/2013 20:59	139		
3	03/15/2013 10:00	03/20/2013 19:59	130		
4	05/11/2013 00:00	05/24/2013 00:59	313		
5	06/03/2013 15:00	06/10/2013 18:59	172		
6	07/12/2013 04:00	07/14/2013 07:59	52		
7	07/14/2013 14:00	07/14/2013 14:59	1		
8	07/15/2013 01:00	07/15/2013 08:59	8		
9	07/15/2013 19:00	07/15/2013 19:59	1		
10	10/17/2013 03:00	10/20/2013 01:59	71		
11	11/03/2013 18:00	11/06/2013 12:59	67		
12	11/06/2013 15:00	11/06/2013 15:59	1		
13	12/31/2013 21:00	01/05/2014 20:59	120		
14	02/28/2014 01:00	03/01/2014 23:59	47		
15	04/12/2014 01:00	04/13/2014 21:59	45		
16	04/14/2014 05:00	04/14/2014 08:59	4		
17	04/22/2014 09:00	04/23/2014 20:59	36		
18	06/22/2014 15:00	06/24/2014 11:59	45		
19	07/07/2014 15:00	07/09/2014 10:59	44		
20	07/10/2014 20:00	07/13/2014 07:59	60		
21	09/02/2014 14:00	09/04/2014 21:59	56		
22	09/07/2014 01:00	09/08/2014 10:59	34		
23	09/09/2014 14:00	09/10/2014 14:59	25		
24	09/10/2014 23:00	09/11/2014 01:59	3		
25	09/11/2014 13:00	09/11/2014 13:59	1		
26	09/19/2014 21:00	11/15/2014 19:59	1367		
27	11/15/2014 23:00	11/16/2014 03:59	5		
28	11/16/2014 22:00	11/17/2014 03:59	6		
29	11/17/2014 19:00	11/18/2014 01:59	7		
30	01/23/2015 02:00	01/27/2015 14:59	109		
31	05/17/2015 02:00	05/19/2015 16:59	63		
32	08/11/2015 13:00	08/11/2015 14:59	2		
33	09/11/2015 23:00	09/15/2015 00:59	74		
34	09/15/2015 11:00	09/15/2015 11:59	1		
35	10/16/2015 00:00	10/24/2015 22:59	215		

Source Downtime Report

Baldwin Unit 1

DYNEGY

From: 01/01/2013 00:00 To: 12/31/2016 23:59 Facility Name: Baldwin
Generated: 03/16/2018 12:01 Location: Reports Facility Location

Inc No	Start Time	End Time	Duration in Hour(s)	Reason Code - Description	Action Code - Description
36	12/20/2015 03:00	12/29/2015 21:59	235		
37	01/13/2016 23:00	01/16/2016 00:59	50		
38	01/31/2016 06:00	01/31/2016 17:59	12		
39	03/06/2016 10:00	04/06/2016 05:59	740		
40	04/07/2016 05:00	04/07/2016 19:59	15		
41	04/07/2016 22:00	04/11/2016 03:59	78		
42	04/12/2016 02:00	04/12/2016 21:59	20		
43	04/25/2016 10:00	04/25/2016 12:59	3		
44	05/22/2016 12:00	05/26/2016 19:59	104		
45	06/27/2016 09:00	07/03/2016 19:59	155		
46	07/31/2016 16:00	08/02/2016 13:59	46		
47	10/31/2016 03:00	11/08/2016 20:59	210		
48	11/09/2016 06:00	11/09/2016 13:59	8		
49	11/30/2016 15:00	12/04/2016 12:59	94		

Operating Time Summary

Available Data for Report (excludes missing data):	35,064.00 Hour(s)
Total Downtime:	5,159.00 Hour(s)
Downtime Percentage:	14.71 %
Total Uptime:	29,905.00 Hour(s)
Uptime Percentage:	85.29 %